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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/756,052

01/12/2004

Chris Beatty

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22879

7590

04/18/2007

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EXAMINER

SPEER, TIMOTHY M

ART UNIT

PAPER NUMBER

1775

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

4

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/756,052	BEATTY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Timothy M. Speer	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 26-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu (USPN 6,440,283).

3. Liu teaches mixed metal oxide layers, e.g., yttria stabilized zirconia, formed on a substrate (col. 9, lines 10-51, for instance). The process limitations recited in the present claims are not being given patentable weight, since applicant is claiming a product and not a process. It is patentability of the claimed product that must be established. In the present case, the claimed product is merely a mixed oxide film. The applied prior art reference teaches such a layer and, accordingly, it is the Examiner's position that the present claims are anticipated by the applied prior art.

4. Claims 26-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang (USPN 6,251,473).

5. Wang teaches mixed oxide layers, e.g., yttria stabilized zirconia, formed on a substrate (col. 3, line 65 to col. 4, line 63, for instance). The process limitations recited in the present claims are not being given patentable weight, since applicant is claiming a product and not a process. It is patentability of the claimed product that must be established. In the present case, the claimed product is merely a mixed oxide film. The applied prior art reference teaches such a

Art Unit: 1775

layer and, accordingly, it is the Examiner's position that the present claims are anticipated by the applied prior art.

6. Claims 26-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnett (USPN 6,479,178).

7. Barnett teaches mixed oxide layers, e.g., yttria/ceria, formed on a substrate (col. 13, lines 35-50, for instance). The process limitations recited in the present claims are not being given patentable weight, since applicant is claiming a product and not a process. It is patentability of the claimed product that must be established. In the present case, the claimed product is merely a mixed oxide film. The applied prior art reference teaches such a layer and, accordingly, it is the Examiner's position that the present claims are anticipated by the applied prior art.

8. Claims 26-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (USPN 5,494,700).

9. Anderson teaches mixed oxide layers, e.g., ceria/samaria, formed on a substrate (col. 6, lines 15-58, for instance). The process limitations recited in the present claims are not being given patentable weight, since applicant is claiming a product and not a process. It is patentability of the claimed product that must be established. In the present case, the claimed product is merely a mixed oxide film. The applied prior art reference teaches such a layer and, accordingly, it is the Examiner's position that the present claims are anticipated by the applied prior art.

#### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

Art Unit: 1775

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 34-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Support could not be found for the limitation that the oxide layer "does not replicate said surface defects of said substrate." Any negative limitation or exclusionary proviso must have basis in the original disclosure. See MPEP 2173.05(i). In the present case, so such support was found and, accordingly, this limitation is considered to constitute new matter.

12. Contrary to applicant's assertion that the limitation at issue finds support in the specification, the Examiner was unable to find such support. Moreover, applicant failed to point to specific support for the limitation at issue. Indeed, paragraph [0032] of the original specification states that "[s]ome surface defects are present," clearly indicating that the layer does, at least to an extent, "replicate" surface defects in the substrate.

#### ***Response to Arguments***

13. Applicant's arguments filed 12/22/06 have been fully considered but they are not persuasive.

14. Regarding the rejection over Liu, applicant asserts that a response was impossible, because the patent number cited in the Office Action (6,440,238) is not to Liu. While this is the case, clearly, the Examiner intended patent number 6,440,283 in the action. This is the ONLY patent to Liu of record and the error is clearly the result of the last two digits being transposed. For applicant to assert that a response was not possible is disingenuous. The name on the patent

Art Unit: 1775

cited in the rejection is correct and it is the ONLY Liu patent cited by the Examiner. Moreover, if applicant was so confused by the transposition of the last two digits of the patent number, a simple call to the Examiner would have resolved any confusion. Applicant chose, however, not to make such an inquiry. Accordingly, this ground of rejection is maintained.

15. Regarding the other art rejections, applicant first asserts that the applied prior art fails to teach "nanoparticles." This argument is not persuasive. The present claims do not recite and specific particle sizes, only that the particles are "nanoparticles" of undefined dimensions.

Virtually any particles, such as those of the applied art, may be described in terms of a nanometer scale and, accordingly, this limitation is not seen to distinguish over the applied prior art.

16. Finally, with respect to independent claim 34, applicant asserts that the applied prior art fails to teach that the coating "does not replicate [the] surface defects of [the] substrate." In regards to this argument, applicant merely states that a teaching is not found in the art. Applicant has failed to show that the prior art layers replicate such defects. The Examiner has reviewed the prior art and was unable to find a teaching that the layers replicate surface defects in the substrate. Accordingly, the Examiner concludes that the prior art layers DO NOT replicate such defects.

17. In light of the above, applicant's arguments have been considered but are not found to be persuasive.

*Conclusion*

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

19. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Speer whose telephone number is 571-272-8385. The examiner can normally be reached on M-Th, M-F.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 1775

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Timothy M. Speer



JENNIFER MCNEIL  
SUPERVISORY PATENT EXAMINER  
4/16/7